

## CLAIMS:

1. A circuit arrangement for controlling a display device (2) which can be operated in a partial mode, comprising a row drive circuit (4) for driving n rows of the display device (2) and a column drive circuit (3) for driving m columns of the display device, wherein the row drive circuit (4) controls the n rows of the display device sequentially from 1  
5 to n, and the column drive circuit (3) supplies column voltages to the m columns, which voltages correspond to the picture data to be displayed of pixels of the controlled row, characterized in that a logic function ( $L_1$ - $L_n$ ) is included in the row drive circuit (4) in front of at least one row output ( $Z_1$ - $Z_n$ ), to which logic function a first control signal ( $R_E$ ) can be supplied, said first control signal ( $R_E$ ) achieving a deactivation/activation of the row output  
10 ( $Z_1$ - $Z_n$ ) in dependence on the partial mode.
2. A circuit arrangement as claimed in claim 1, characterized in that the logic function ( $L_1$ - $L_n$ ) is connected in front of each row output ( $Z_1$ - $Z_n$ ).
- 15 3. A circuit arrangement as claimed in claim 1 or 2, characterized in that the logic function ( $L_1$ - $L_n$ ) is realized as an AND gate.
4. A circuit arrangement as claimed in claim 1, characterized in that the row drive circuit (4) comprises a shift register (41) which has n stages ( $S_1$  to  $S_n$ ) and n outputs ( $A_1$   
20 to  $A_n$ ), and in that a second control signal ( $R_P$ ) can be supplied to the shift register at the input (E) thereof for controlling the consecutive rows 1 to n, which second control signal activates the outputs ( $A_1$  to  $A_n$ ) of the shift register (41) consecutively in dependence on a clock signal (T).
- 25 5. A circuit arrangement as claimed in claim 2, characterized in that the second control signal ( $R_P$ ) is capable of switching off all n row outputs ( $Z_1$  to  $Z_n$ ) by means of the logic functions ( $L_1$  to  $L_n$ ) during the control of a line ( $Z_3$ ,  $Z_4$ ) that is not to be displayed in the partial mode.

6. A circuit arrangement as claimed in claim 1, characterized in that a control logic (5) in the column drive circuit (3) generates the first control signal ( $R_E$ ) in dependence on a partial mode and supplies it to the row drive circuit (4).

5 7. A circuit arrangement as claimed in claim 1, characterized in that the column drive circuit (3) supplies no column voltages to the column outputs ( $A_1$  to  $A_m$ ) in the case of a line ( $Z_3$ ,  $Z_4$ ) that is not to be displayed.

8. A circuit arrangement as claimed in claim 1, characterized in that the frequency of the clock signal (T) can be increased in the case of one or several consecutive rows ( $Z_3$ ,  $Z_4$ ) that is or are not to be displayed.

9. A row drive circuit (4) for controlling n rows of a display device (2) having n outputs ( $A_1$  to  $A_n$ ), with a logic function ( $L_1$  to  $L_n$ ) connected in front of each row output ( $Z_1$  to  $Z_n$ ), by means of which function the row outputs ( $Z_1$  to  $Z_n$ ) can be deactivated/activated in dependence on a partial mode upon the supply of a first control signal ( $R_E$ ).

10. A display device (2) comprising a circuit arrangement as claimed in any one of the claims 1 to 8.

11. An electronic appliance comprising a display device (2) as claimed in claim 10.

12. A method of realizing a partial mode wherein a display device (2) is controlled by a circuit arrangement comprising a row drive circuit (4) for driving the n rows and a column drive circuit (3) for supplying column voltages, wherein the n rows are sequentially controlled from 1 to n and column voltages necessary for displaying the corresponding picture data of this row are supplied to the m columns, and wherein all row outputs ( $Z_1$  to  $Z_n$ ) are deactivated by a first control signal ( $R_E$ ) in the control of a row ( $Z_3$ ,  $Z_4$ ) not to be displayed in the realization of a partial mode, while all row outputs ( $Z_1$  to  $Z_n$ ) are activated again by means of the first control signal ( $R_E$ ) for the control of a row ( $Z_1$ ,  $Z_2$ ,  $Z_5$ ) that is to be displayed in the partial mode.